

Claims

1. A method of fabricating an optoelectronic component including layers, the layers comprising at least two electrode layers for electric coupling and at least one organic optoelectronically active layer, each of the at least one organic optoelectronically active layer being placed between at least one pair of electrode layers, the method comprising

forming at least one organic optoelectronically active layer by transferring a liquid-phase organic optoelectronically active material onto a surface of a layer of the component from a rotating roll having a direct contact with the surface of the layer moving along with rotation of the rotating roll.

2. A method for fabricating at least one optoelectronic component, each component including layers, the layers comprising at least two electrode layers for electric coupling and at least one organic optoelectronically active layer, each of the at least one organic optoelectronically active layer being placed between a pair of electrode layers, the method comprising

running a continuous substrate layer through a roll-to-roll process using rotating rolls,

depositing other layers of the at least one component on the substrate layer; and

forming, according to a gravure coating method, at least one organic optoelectronically active layer in the roll-to-roll process by transferring a liquid-phase organic optoelectronically active material onto a surface of a layer from a rotating roll having a direct contact with the surface of the layer.

3. The method of claim 1, the method further comprising transferring the organic optoelectronically active material onto a surface of an electrode layer of a pair of electrodes from a roll having a direct contact with the surface of the electrode layer.

4. The method of claim 1, the method further comprising

forming a structure of at least one operational layer between at least one pair of electrode layers;

transferring the organic optoelectronically active material onto a surface of the structure of at least one operational layer from a roll having a direct contact with the surface of the structure of at least one operational layer.

5. The method of claim 2, the method further comprising forming more than one component and separating the components by cutting the continuous substrate having components into pieces including a desired number of components.

6. The method of claim 1, the method further comprising depositing all layers of the at least one component except the substrate layer one after another; and

depositing each layer by transferring the liquid-phase component material onto a surface of a layer of the component from a rotating roll having a direct contact with the surface of the layer moving along with the rotation of the rotating roll.

7. The method of claim 2, the method further comprising forming an array or a matrix of components.

8. The method of claim 1, the method further comprising forming a multilayer component by depositing layers of at least two components one upon another.

9. The method of claim 2, the method further comprising forming, using a substrate, a layer of the at least one component.

10. The method of claim 1, the method further comprising hardening the at least one organic optoelectronically active layer of liquid-phase using radiation or chemical treatment.

11. The method of claim 1, the method further comprising spreading the liquid-phase organic optoelectronically active material to the rotating roll having the direct contact with the surface of the layer of the component.

12. The method of claim 1, the method further comprising spreading the liquid-phase organic optoelectronically active material to a first rotating roll;

transferring the liquid-phase organic optoelectronically active material from the first roll to a second rotating roll; and

forming at least one organic optoelectronically active layer by transferring the liquid-phase organic optoelectronically active material onto a surface of a layer of the component from the second rotating roll having a direct

contact with the surface of the layer moving along with the rotation of the rotating roll.

13. The method of claim 1, the method further comprising transferring droplets of the liquid-phase organic optoelectronically active material to the surface of the layer of the component from cells of the rotating roll having a direct contact with the surface of the layer, such liquid-phase droplets remaining separately onto the surface on which they have been transferred.

14. The method of claim 13, the method further comprising forming components having a size of a droplet.

15. The method of claim 1, the method further comprising transferring droplets of the liquid-phase organic optoelectronically active material onto the surface of the layer of the component from cells of the rotating roll having a direct contact with the surface of the layer, such liquid-phase droplets joining together, forming a uniform layer on the surface onto which they have been transferred.

16. The method of claim 1, the method further comprising patterning an electrode of the component for forming a desired shape of the active region.

17. The method of claim 1, the method further comprising patterning at least one layer of the organic optoelectronically active material of the component for forming a desired shape of the active region.

18. The method of claim 1, the method further comprising encapsulating the component.

19. An optoelectronic component including layers, the layers comprising at least two electrode layers for electric coupling and at least one organic optoelectronically active layer, each of the at least one organic optoelectronically active layer being placed between at least one pair of electrode layers, and

the at least one organic optoelectronically active layer of the optoelectronic component being formed by transfer of a liquid-phase organic optoelectronically active material onto a surface of a layer of the component from a rotating roll having a direct contact with the surface of the layer moving along with rotation of the rotating roll.

20. An optoelectronic component including layers, the layers comprising at least two electrode layers for electric coupling and at least one organic optoelectronically active layer, each of the at least one organic optoelectronically active layer being placed between at least one pair of electrode layers, and

the at least one organic optoelectronically active layer of the optoelectronic component being formed using a gravure coating method with transfer of a liquid-phase organic optoelectronically active material onto a surface of a layer of the component from a rotating roll having a direct contact with the surface of the layer in a roll-to-roll process where a continuous substrate layer is run through the process using rotating rolls.